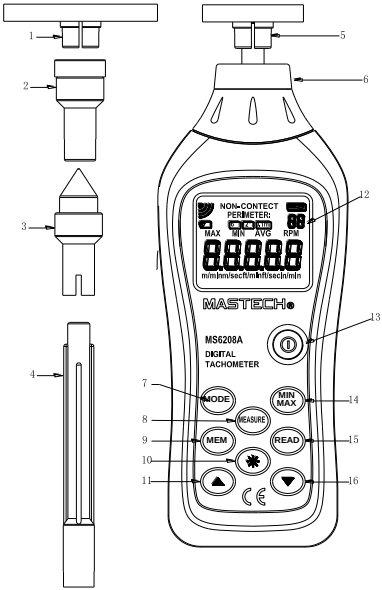
General Instructions

The MS6208A is a contact-type digital tachometer with stable performance, high reliability and high safety performance. The core component of the meter is a compact high-speed integrated chip. The meter will display rotation speeds from 50RPM---19999RPM. The LCD is backlit to allow making and reading measurements in low light conditions.

Panel Diagram (see front view)

1. 6 in. idler wheel
2. Concave touch tip
3. Protruding touch tip
4. Lengthening bar
5. 0.1m idler wheel
6. Measurement bearing
7. Mode switch key
8. Measurement key
9. Data storage key
10. Backlight and HOLD composite key
11. Plus key
12. LCD
13. Power switch key
14. Maximum and minimum key
15. Data storage read key
16. Minus key



MS6208A Front View

Accessories

1. 1 MS6208A bare machine
2. 1 Operation Manual
3. 2 measurement idler wheels
4. 2 measurement touch tips
5. 1 lengthening bar
6. 4 x 1.5V AAA battery

OOBA (out of box audit)

When you get a new tachometer, check the meter and its accessories. If something is damaged or missing, please contact the store where you bought the meter to obtain missing items or to replace the meter..

Safety instructions

Operating environment:

- Elevation ＜2000 m
- Relative humidity (RH) ≦80%RH
- Operating temperature: 0 - 40℃

Warning

- To avoid damaging the meter or affecting measurement accuracy, do not open the meter.
- Do not use the meter in the places with high temperature and high humidity, or near flammable and explosive materials.

● Storage and maintenance: Do not use alcohol or other solvents to clean the meter. If it is not used for long time, please remove batteries and put the meter in a dry and clean environment.

Safety Symbols

Important safety information

Do not recycle

Low battery warning

The meter complies with CE safety standard

LCD symbols description

1. Signal symbol
2. Idler wheel size symbol
3. Low battery symbol
4. Maximum measurement mode
5. Rotation speed reading
6. Minimum measurement mode

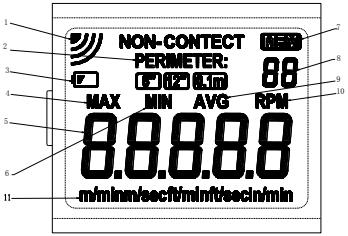
7. Storage state

8. Storage number

9. Average measurement value

10. Rotation speed unit symbol

11. Speed measurement mode display



LCD Figure

Key Description

1. Switch key

Function: On/Off operation

Operation: When the meter is OFF, lightly touch switch key to turn on the meter. When the meter is ON, lightly touch switch key to turn off the meter.

2. Maximum and minimum key

Function: Switch maximum, minimum and average display value

Operation: When the LCD display is MAX, current measurement is at maximum. When the LCD display is MIN, current measurement is at minimum. When the LCD display is AVG, current measurement is average value.

3. Mode switch key

Function: Switch measurement mode

Operation: To operate mode switch key, select measurement mode from 0 to 5, as appropriate for conditions

4. Measurement key

Function: Switch measurement key

Operation: When turning on the meter, press the measurement key to measure according to operating instructions

5. Storage key

Function: Store current rotation speed value

Operation: When you want to store the current rotation speed value, press the storage key together with other keys, and you can store the current value to the specified storage number.

6. Read key

Function: Read the rotation speed value under the stored number.

Operation: When you want to store the rotation speed value under a storage number, press the read key together with other keys, and you can read the rotation speed value under the stored number.

7. Backlight and HOLD key

Function: Turn on and off backlight

Operation: Quickly press backlight and HOLD keys to turn on/off HOLD function. Press more than 2 sec to turn on/off backlight function

8. Plus key

Function: Add storage number when reading or storing

Operation: When entering storage state, use plus key to add the current storage number

9. Minus key

Function: Subtract storage number when reading or storing

Operation: When entering storage state, use plus key to subtract the current storage number

Technical Parameter

I. General specifications

1. Rotation speed display is five-digit LCD number with maximum of 19999

2. Display 0 below 50 RPM

3. Measurement mode 0--5

4. Display voltage lower than 4.5V when batteries are low

5. Dimension: 155mm x 60mm x 27

6. Weight: 120g

7. Power supply: 4 × 1.5V SIZEAAA battery

8. Auto off time is 30 sec

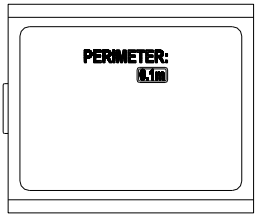
II. Technical parameter

Measuring scope	Resolution	Accuracy
50-99.99RPM	0.01RPM	±(0.03% ±2d)
100-9999.9RPM	0.1RPM	
10000-19999	1RPM	

Measurement idler wheel selection

Hold the MODE key when turning on the meter to enter idler wheel selection mode as shown below. The default selection is the 0.1m idler wheel. At this time, you can select 6", 12" or 0.1m of the wheel by operating the plus or minus key. After selecting, lightly press the MIN / MAX key to enter the normal test mode.

Note: Select 0.1m of wheel for m/min and m/sec measurement, or select 6" or 12" wheel for ft/min, ft/sec and in/min. Otherwise, it will not measure



Measurement idler wheel selection mode

Measuring operation instructions

⚠Warning:

When measuring, please keep a safe distance from high-speed rotating objects to avoid machine damage or personal injury.

Ⅰ. Rotation speed measurement

1. Install lengthening bar and touch pit to the meter

2. Start the equipment to be measured and wait for rotation speed to stabilize

3. Start the tachometer, enter the default speed measurement mode, bring the meter gradually closer to the rotating object, so that the touch pit can smoothly contact the object to be measured. Press the measurement key and read LCD display value.

⚠ **Due to high lengthening bar pendulum deflection, which will increase inaccuracy above 10000 RPM, please remove the lengthening bar if object to be measured rotates at speed greater than 10000 RPM.**

Ⅱ. Speed measurement

1. Start the tachometer and enter the default speed measurement mode. Select m/min, m/sec, t/min, ft/sec or in/min mode through operating MODE key, and the LCD will display the selected idler wheel size.

2. Install the selected idler wheel.

3. Start the equipment to be measured and wait for rotation speed to stabilize. Bring the idler wheel gradually closer to the belt until it makes contact with the belt, then read LCD display value.

Data storage and reading operation

I. Data storage operation

When you want to store rotation speed value, press MEM key in the non-HOLD state. MEM and default storage number 00 will display on the upper right corner of LCD. Press plus or minus key to select storage number. At this time, if you press the backlight key, the rotation speed value will flash. The current rotation speed value can be stored in the selected storage number. Exit the storage state by pressing the READ key under the storage state.

II. Data reading operation

When you want to read stored values, press READ

key in the non-HOLD state. The default storage number 00 will display on the upper right corner of LCD. Press plus or minus key to select storage number and read the value in the current storage number. Exit the storage state by operating MEM key in the storage state.

Battery installation or replacement

When symbol displays on LCD, it means low batteries. Please change the batteries at this time. The meter uses four 1.5V AAA batteries. To replace batteries, open battery cover, remove the old batteries, install new batteries of the correct size, according to the illustration on the cover. Close the battery cover after installation, and tighten screw before using the Meter.